



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,604	01/25/2001	Stephen M. Howard	EMC-002PUS	4397

22494 7590 11/30/2004

DALY, CROWLEY & MOFFORD, LLP
SUITE 101
275 TURNPIKE STREET
CANTON, MA 02021-2310

EXAMINER

OSMAN, RAMY M

ART UNIT	PAPER NUMBER
----------	--------------

2157

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/769,604

Applicant(s)

HOWARD ET AL.

Examiner

Ramy M Osman

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to terminal disclaimer and amendments filed on 9/3/2004. Claims 1-20 are pending.

Drawings

2. The drawings were received on 4/9/2001. These drawings are accepted.

Terminal Disclaimer

3. The terminal disclaimer filed on 9/3/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of United States Patent No. 6,721,766 issued April 13, 2004, has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Objections

4. Claim 15 objected to because of the following informalities: Line 3 of the claim should have a colon “:” or semi-colon “;” after the word “including”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 1 rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Browsing and marking restorable objects is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). This step has been excluded from claim 1 and is essential for the invention to function. Browsing and marking restorable objects must explicitly take place before submitting a list of marked restorable objects. See figure 6 elements 314 and 316, in applicants drawings.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation “retrieving a list of objects...” gives no indication as to who is retrieving the list. The fact that the list is restorable by a client does not mean that it is the client who retrieved the list. There is also no indication as to where the list is being retrieved from, locally or externally.

The limitation “submitting a list of restorable objects ...” is unclear as to whether this list is the same list as the “retrieving a list of objects...”. If it is, then the language must indicate this by using the same language, and by also using the word “the” or “said” instead of “a” which implies a different list. If these are two different lists then an explanation is needed as to where the list came from and its distinction from the other list.

Claims 2-11 inherit the deficiencies of claim 1.

9. Claim 12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The limitation “determining restorable objects marked for restoration by the user under control of the restore engine process” is unclear as to what the determining is doing.

10. Claims 15 and rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The term “restore triangle” has not been properly defined to allow one of ordinary skill in the art to understand the scope of this limitation. In the examiners attempt to understand this limitation, the examiner will interpret it as an abstract idea which refers to the three steps of: marking a list of objects, submitting the list for restoration and executing restoration of the objects marked in the list. This interpretation is based on page 11 lines 25-30 in the specification. This is also understood to be inherent in any restore process that involves marking items, submitting the items and executing restoration of the objects.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Shen (US Patent No 6,611,850) in view of Rodriguez et al (US Patent No 6,427,149).**

13. In reference to claim 1, Shen teaches a method of restoring backed up data (Abstract), comprising:

a list of objects that are restorable by a client (column 19 lines 10-20, Shen discloses accessing a restore screen for restoring a file);

displaying the list of restorable objects for browsing by a user (column 19 lines 10-20, Shen discloses accessing a restore screen for restoring a file by a user);

submitting a list of restorable objects marked for restoration by the client (column 19 lines 19-30, Shen discloses a user selecting and submitting a restorable object for restoration);

executing a restoration of the submitted restorable objects via a remote procedure call (column 19 lines 20-23 & 35-50 and column 24 lines 45-67, Shen discloses executing a restore process via a network environment).

Shen fails to explicitly teach the limitations wherein the list of objects is retrieved, wherein there is a plurality of marked objects and wherein multiple restore submissions can be made prior to restore execution. However, Rodriguez teaches a client retrieving a list of archive

Art Unit: 2157

objects from a server over a network, the client viewing the archive list via a browser graphical user interface, the client concurrently selecting and submitting one or more files to receive prior to execution to the extraction of the archive to the client (Abstract, column 3 lines 18-25, column 4 lines 24-40 & 55-65 and column 5 lines 10-31).

It would have been obvious for one of ordinary skill in the art to modify Shen by retrieving a list of objects that are restorable by a client; submitting a list of restorable objects marked for restoration by the client; and executing a restoration of the submitted restorable objects via a remote procedure call such that multiple restore submissions can be made prior to restore execution as per the teachings of Rodriguez so to allow remote access of archived or backup data so they can be retrieved or restored in order to restore corrupted data that has previously been archived.

14. In reference to claim 2, Shen teaches the method according to claim 1, further including executing multiple restore submissions concurrently. (column 4 lines 23-40 & 55-65, Rodriguez discloses multiple restore submissions concurrently). See also claim 1.

15. In reference to claim 3, Shen teaches the method according to claim 1, further including initiating a restore session for the client. (column 4 lines 23-40 & 55-65, Rodriguez discloses initiating a restore session for the client)

16. In reference to claim 4, Shen teaches the method according to claim 3, further including creating a restore engine process for the retrieving, browsing, submitting and executing of restore objects (Abstract and column 19 lines 5-30).

Art Unit: 2157

17. In reference to claim 5, Shen teaches the method according to claim 4, wherein the client communicates with the restore engine process via remote procedure calls (column 4 lines 23-40 & 55-65, Rodriguez teaches remote restoration over a network).

18. In reference to claim 6, Shen teaches the method according to claim 4.

Shen fails to teach wherein the restore engine process is created by a dispatch daemon on a backup storage system server. However, Rodriguez teaches a restore process on an archive server (column 4 lines 23-41 and column 5 lines 10-30).

It would have been obvious for one of ordinary skill in the art to modify Shen by making the restore engine process is created by a dispatch daemon on a backup storage system server as per the teachings of Rodriguez so that the restoration can occur remotely over a network.

19. In reference to claim 7, Shen teaches the method according to claim 4, wherein the restore engine process is terminated upon completion of the restore execution (Shen and Rodriguez inherently teach terminating the restore process, it is a well known feature in the art to terminate a process after its completion).

20. In reference to claim 8, Shen teaches the method according to claim 4, further comprising creating a restore process for data to be restored over a network to a client (Shen; column 19 lines 5-30, column 20 lines 50-67 and column 24 lines 45-67).

Shen fails to explicitly teach wherein the restore engine process runs on a backup data storage server and further including creating a work item restore process on the backup data server, a server restore process for generating a stream of data to be restored, and a client restore process for receiving the data stream . However, Rodriguez teaches a restore process on an

Art Unit: 2157

archive server, a data stream over a network for data retrieval and a client process for receiving the data (Abstract, column 4 lines 23-41 and column 5 lines 10-30).

It would have been obvious for one of ordinary skill in the art to modify Shen by making the restore engine process runs on a backup data storage server and further including creating a work item restore process on the backup data server, a server restore process for generating a stream of data to be restored, and a client restore process for receiving the data stream as per the teachings of Rodriguez so that the restoration can occur remotely over a network.

21. In reference to claim 9, Shen teaches the method according to claim 4, further including detecting and identifying libraries that support associated catalogs of backed up data for processing of backed up data by the restore engine process. (column 4 lines 23-40 & 55-65, Rodriguez discloses identifying archived files for the purpose of restoring data)

22. In reference to claims 10 and 11, Shen teaches the method according to claim 9, further including adding a new library supporting new methods of backing up data. (column 4 lines 23-40 & 55-65, Rodriguez discloses identifying archived files for the purpose of restoring data)

23. In reference to claims 12 and 13, Shen teaches a method of restoring backed up data (Abstract), comprising:

initiating a restore session for a first client through a graphical user interface associated with the client (column 4 lines 25-41, column 11 lines 1-8 & 33-43 and column 19 lines 10-20, Shen teaches restoring data by inputting via an interface);

Art Unit: 2157

displaying a list of restorable objects for browsing by a user associated with the client via the graphical user interface under the control of the restore engine process (column 19 lines 10-20, Shen discloses a user viewing and selecting files);

determining restorable objects marked for restoration by the user under control of the restore engine process (column 19 lines 10-30, Shen discloses selecting files for restoration);

executing the restoration of the marked objects under control of the restore engine process independently of the browsing, marking and submitting of the restorable object (column 19 lines 35-50 and column 24 lines 45-67).

Shen fails to explicitly teach the complete limitations of initiating a restore session for a first client via a dispatch daemon running on a data storage server through a graphical user interface associated with the client; creating a restore engine process in response to a request by the dispatch daemon; establishing a connection between the graphical user interface and the restore engine process; displaying a list of restorable objects for browsing by a user associated with the client via the graphical user interface under the control of the restore engine process; determining restorable objects marked for restoration by the user under control of the restore engine process; storing a list of marked restorable objects submitted by the client to the restore engine process; and executing the restoration of the marked objects under control of the restore engine process independently of the browsing, marking and submitting of the restorable object such that multiple restore submissions can be made prior to restore execution.

However, Rodriguez teaches a client retrieving a list of archive objects from a server over a network, the client viewing the archive list via a browser graphical user interface, the client concurrently selecting and submitting one or more files to receive prior to execution to the

Art Unit: 2157

extraction of the archive to the client (Abstract, column 3 lines 18-25, column 4 lines 24-40 & 55-65 and column 5 lines 10-31).

It would have been obvious for one of ordinary skill in the art to modify Shen by initiating a restore session for a first client via a dispatch daemon running on a data storage server through a graphical user interface associated with the client; creating a restore engine process in response to a request by the dispatch daemon; establishing a connection between the graphical user interface and the restore engine process; displaying a list of restorable objects for browsing by a user associated with the client via the graphical user interface under the control of the restore engine process; determining restorable objects marked for restoration by the user under control of the restore engine process; storing a list of marked restorable objects submitted by the client to the restore engine process; and executing the restoration of the marked objects under control of the restore engine process independently of the browsing, marking and submitting of the restorable object such that multiple restore submissions can be made prior to restore execution as per the teachings of Rodriguez so to allow remote access of archived or backup data so they can be retrieved or restored in order to restore corrupted data that has previously been archived.

24. In reference to claim 14, Shen teaches the method according to claim 12, further including supporting a new backup data method by adding a library corresponding to the new backup data method. (column 4 lines 23-40 & 55-65, Rodriguez discloses identifying archived files for the purpose of restoring data)

Art Unit: 2157

25. In reference to claim 15, Shen teaches a data backup and storage system (Abstract), comprising:

a backup storage system for storing backup data from a client storage system under control of a user associated with the client, the backup storage system (column 19 lines 10-30) including:

a list of objects that are restorable by a client (column 19 lines 10-20, Shen discloses accessing a restore screen for restoring a file); displaying the list of restorable objects for browsing by a user (column 19 lines 10-20, Shen discloses accessing a restore screen for restoring a file by a user); submitting a list of restorable objects marked for restoration by the client (column 19 lines 19-30, Shen discloses a user selecting and submitting a restorable object for restoration); executing a restoration of the submitted restorable objects via a remote procedure call (column 19 lines 20-23 & 35-50 and column 24 lines 45-67, Shen discloses executing a restore process via a network environment).

Shen fails to explicitly teach the limitations a server creating a restore engine process as part of a restore session with a client, the restore engine communicating with the client via remote procedure calls to allow the user to browse restorable objects, mark selected ones of the restorable objects for restoration, submit a list of restorable objects marked by the user, and execute restoration of the submitted list of restorable objects, wherein the restore execution is performed independently of the browse, mark and submit operations such that multiple restore submissions can be made prior to execution of the restore. However, Rodriguez teaches a client retrieving a list of archive objects from a server over a network, the client viewing the archive list via a browser graphical user interface, the client concurrently selecting and submitting one or

Art Unit: 2157

more files to receive prior to execution to the extraction of the archive to the client (Abstract, column 3 lines 18-25, column 4 lines 24-40 & 55-65 and column 5 lines 10-31).

It would have been obvious for one of ordinary skill in the art to modify Shen by incorporating a server creating a restore engine process as part of a restore session with a client, the restore engine communicating with the client via remote procedure calls to allow the user to browse restorable objects, mark selected ones of the restorable objects for restoration, submit a list of restorable objects marked by the user, and execute restoration of the submitted list of restorable objects, wherein the restore execution is performed independently of the browse, mark and submit operations such that multiple restore submissions can be made prior to execution of the restore as per the teachings of Rodriguez so to allow remote access of archived or backup data so they can be retrieved or restored in order to restore corrupted data that has previously been archived.

a work item restore processes a server restore processes and a client restore process created by the restore engine process to form a restore triangle for executing the restore operation. In the examiners attempt to understand the limitation "restore triangle", the examiner will interpret it as an abstract idea which refers to the three steps of: marking a list of objects, submitting the list for restoration and executing restoration of the objects marked in the list. This interpretation is based on page 11 lines 25-30 in the specification. This is also understood to be inherent in any restore process that involves marking items, submitting the items and executing restoration of the objects. It is therefore inherent in view of Shen.

Art Unit: 2157

26. In reference to claims 17, Shen teaches the system according to claim 15, wherein the restore engine process processes library's upon restore initialization such that libraries can be added to the system for supporting new backup methods. (column 4 lines 23-40 & 55-65, Rodriguez discloses identifying archived files for the purpose of restoring data)

27. In reference to claims 18, Shen teaches the system according to claim 17, further including a dispatch daemon for initiating the restore session (Shen inherently teaches a daemon for initiating a session, column 3 lines 5-30 and column 19 lines 5-30).

28. In reference to claims 19, Shen teaches the system according to claim 15, further including further restore engine processes corresponding to further restore sessions initiated by additional clients (Rodriguez inherently teaches multiple clients restoring archive data, column 4 lines 25-55).

29. In reference to claims 20, Shen teaches the system according to claim 19, further including additional restore triangles for executing multiple work item restores concurrently. In the examiners attempt to understand the limitation "restore triangle", the examiner will interpret it as an abstract idea which refers to the three steps of: marking a list of objects, submitting the list for restoration and executing restoration of the objects marked in the list. This interpretation is based on page 11 lines 25-30 in the specification. This is also understood to be inherent in any restore process that involves marking items, submitting the items and executing restoration of the objects. It is therefore inherent in view of Shen.

Response to Amendment

30. Examiner acknowledges the terminal disclaimer and amendments filed on 9/3/2004.
Applicant amended claims 12 and 15, and cancelled claim 16.

Response to Arguments

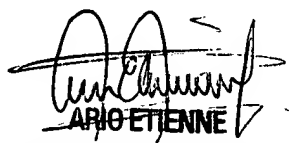
31. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M Osman whose telephone number is (571) 272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMO
November 26, 2004


ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100